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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|---------------------|------------------|
| 10/531,921 | 07/07/2005 | Alexander Kammerlocher | P05,0116 | 6015 |
| 26574 | 7590 | 10/29/2008 | EXAMINER | |
| SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473 | | | | HON, MING Y |
| ART UNIT | | PAPER NUMBER | | |
| 2625 | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 10/29/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/531,921 | KAMMERLOCHER ET AL. | |
| | Examiner | Art Unit | |
| | MING HON | 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 July 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-63 is/are pending in the application.
 4a) Of the above claim(s) 1-32 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 33-60 and 63 is/are rejected.
 7) Claim(s) 61 and 62 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 April 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Objections

1. Claims 61-62 are objected to because of the following informalities: Claim 61 is dependent on itself. Claim 62 is dependent on Claim 61 which is dependent on itself. Appropriate corrections are required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 33, 35-38, 41-52, and 54 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Naito et al. USPN 7389329 hereinafter referred to as Naito.**

4. As per Claim 33, Naito teaches a control system for a printing or copying system, comprising:

at least one operating unit for input or output of operating information of the printing or copying system; (Naito, Figure 1, “Client PC” contains a keyboard)

a first control unit and at least one second control unit, the control units controlling at least one part of the printing or copying system; (Naito, Figure 22, a control unit that allows access between client PC and server and Naito, Figure 1, “Client PC” contains a keyboard, another control unit to allow user to input the data via keyboard)

a data line via which the control units are connected with one another and via which control data are transferred between the control units with aid of a data transfer protocol; (Naito, Figure 1, Component 1, “Ethernet”, Ethernet is a type of data line that will require a form of transfer protocol)

the first control unit providing a server which the operating unit accesses as a client; (Naito, Figure 22, the client PC accesses the server for information)

and at least one part of the transferable control data being input or output by the operating unit in addition to the operating information. (Naito, Column 10, Lines 61-67 to Column 11, Lines 1-10, the file name is inputted and information regarding the file is processed and appropriate information is retrieved from server. Thus the file name is considered control data since it contains information that will control the data to be retrieved)

5. As per Claim 35, Naito teaches a control system according to claim 33 wherein access to the operating information or the control data occurs with aid of a distributed object model in which objects are contained in units of the printing or copying system. (Naito, Figure 24-29, examples of data structures which are transmitted between client PC, server, and printer. Control data can be as seen as data in Figure 29. Also as seen in Naito, Figure 2, there are memory modules as seen in Component 203)

6. As per Claim 36, Naito teaches a control system according to claim 35 wherein the operating unit accesses at least one object of at least one control unit, the object containing data

with operating information or control data. (Naito, Figure 22 and Column 12, Lines 38-48, example of data sent by the server to the client PC)

7. As per Claim 37, Naito teaches a control system according to claim 33 wherein the operating information or the control data are processed with the aid of data, data structures, files, or events that are object-related. (Naito, Figure 24-29, examples of data structures which are transmitted between client PC, server, and printer. Control data can be as seen in Figure 29, “device type” or “address” Also as seen in Naito, Figure 2, there are memory modules as seen in Component 203)

8. As per Claim 38, Naito teaches a control system according to claim 33 wherein the operating unit has at least one object for input or output of the operating information and the control data, (Naito, Column 10, Lines 61-67, the file name is inputted and information regarding the file is retrieved from server, the file name controls the information to be printed since it contains various control data information)

the data transfer between the operating unit and the at least one control unit occurring with help of the objects. (Naito, Figure 24-29, examples of data structures which are transmitted between client PC, server, and printer.)

9. As per Claim 41, Naito teaches a control system according to claim 33 wherein the control data contain control variables, whereby at least values of these control variables can be input or output with aid of the operating unit. (Naito, Column 9, Lines 26-35 and Column 10, Lines 60-67, control variables such as filename and address of peripheral device)

10. As per Claim 42, Naito teaches a control system according to claim 41 wherein the control data are administered with aid of a management information base. (Naito, Column 4, Lines 64-67)

11. As per Claim 43, Naito teaches a control system according to claim 33 wherein the operating information comprise input or output values for configuration or execution of print jobs. (Naito, Column 9, Lines 26-35 and Column 10, Lines 60-67, control variables such as filename and address of peripheral device that is inputted and will impact the execution of a print job.)

12. As per Claim 44, Naito teaches a control system according to claim 33 wherein the control data concern internal control variables. (Naito, Figure 25, Type of PDL, resolution are considered internal control variables)

13. As per Claim 45, Naito teaches a control system according to claim 33 wherein the input or output of the operating information or of the control data occurs with aid of a graphical user interface of the operating unit. (Naito, Figure 6, Component 602 and 603, graphical user interface as a web browser)

14. As per Claim 46, Claim 46 is the method claim of the printing system of Claim 33. Therefore the arguments and analysis is analogous to that made to Claim 33.

15. As per Claim 47, Naito teaches a system for administration and transfer of control data of a printing or copying system, comprising:

information of control data stored in a central database of the printing or copying system, (Naito, Figure 1, Component 2)

the information comprising at least a hierarchical organization of an existing structure of control units and function units; (Naito, Figure 3 and Column 6, Lines 25-29 and Column 9, Lines 55-61, file server is organized in a hierarchical to ease retrieval of information and receives requests and data from the attached devices via Ethernet) and a control unit of the printing or copying system having access to the control data with aid of said information. (Naito, Figure 1, Components 2, 1, 4, and 6, printer has access to receive information)

16. As per Claim 48, Naito teaches a system according to claim 47 wherein a value of a variable stored in a storage region is output together with a clear text designation stored in said database. (Naito, Figure 25, shows a structure that is stored within the server which contains a database that transmits back to the user. The fields are identified with text.)

17. As per Claim 49, Naito teaches a system according to claim 47 wherein the control unit comprises a first control unit, and at least one part of the control data is stored in a second control unit of the printing or copying system. (Naito, Figure 22 and Figure 11, Naito, Column 10, Lines 61-67 to Column 11, Lines 1-10, First control unit is considered the client PC and the second control unit to be the server. Server contains storage units to hold control data.)

18. As per Claim 50, Naito teaches a system according to claim 49 wherein the first control unit reads out at least one part of the control data from the second control unit or transfers the at least one part of the control data to the second control unit. (Naito, Figure 22 and Figure 11, Naito, Column 10, Lines 61-67 to Column 11, Lines 1-10, First control unit is considered the client PC and the second control unit to be the server. Control data is the file that the user desires or wants to execute that needs to be retrieved via the network.)

19. As per Claim 51, Naito teaches a system according to claim 49 wherein the first control unit or the second control unit comprises an operating unit of the printing or copying system. (Naito, Figure 22, a control unit that allows access between client PC and server and Naito, Figure 1, “Client PC” contains a keyboard, another control unit to allow user to input the data via keyboard)

20. As per Claim 52, Naito teaches a system according to claim 49 wherein a distributed object model using a network protocol is provided for transfer of the control data and information between the control units of the database. (Naito, Figure 1, Component 1, “Ethernet”, Ethernet is a type of data line that will require a form of transfer protocol)

21. As per Claim 54, Claim 54 is the method claim of the printing system of Claim 47. Therefore the arguments and analysis is analogous to that made to Claim 47.

22. **Claims 55-60, and 63 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Miura et al. USPN 6661528 hereinafter referred to as Miura.**

23. As per Claim 55, Miura teaches a printing or copying system, comprising:

at least first and second printing units; (Miura, Figure 3, Components “Laser printer” and “color inkjet printer”)

the first printing unit comprising a first operating unit and a first control unit; (Miura, Column 3, Lines 4-9 and Figure 3, Component “Laser Printer”, the switching device is considered a first control unit. Operating unit is considered to be the operation of the printing mechanism)

the second printing unit comprising second operating unit and a second control unit; (Miura, Column 3, Lines 4-9 and Figure 3, Component “Color inkjet printer”, the control unit is the connection to the switching device also known as the first control device that allows the transmission of data from first printer. Operating unit is considered to be the operation of the printing mechanism)

data that contain operating information or control data being transferred between the first control unit and the second control unit; (Miura, Figure 3 and Column 3, Lines 1-9 when switch is set such that second printer is to print the material. The material is transferred from PC to first printer which contains the switching device and then sent to the second printer.)

the first control unit comprising a master control unit (Miura, Column 3, Lines 4-9 and Figure 3, Component “Laser Printer”, the switching device is considered a first control unit which also partially controls the second control unit) and the second control unit comprising a slave control unit; (Miura, Column 3, Lines 4-9 and Figure 3, Component “Color inkjet printer”, the control unit is the connection to the switching device also known as the first control device that allows the transmission of data from first printer. Operating unit is considered to be the operation of the printing mechanism)

and the master control unit providing data for the first operating unit and data for the second operating unit, the control data for the first operating unit and for the second operating unit being provided by the master control unit. (Miura, Column 3, Lines 1-9, the control data is the designation of the printer to be used and will be used by the switching device. The data for operating unit would be the print data)

24. As per Claim 56, Miura teaches a system according to claim 55 wherein the first control unit provides the same data to the first operating unit and to the second operating unit. (Miura, Figure 3 and Column 3, Lines 1-9 when switch is set such that second printer is to print the material. The material is transferred from PC to first printer which contains the switching device and then sent to the second printer.)

25. As per Claim 57, Miura teaches a system according to claim 55 wherein both the data transferred between the control units and the data transferred from the first control unit to the second operating unit are transferred over a data line. (Miura, Figure 3, as seen the first printer and second printer is connected to each other and Column 7, Lines 3-8)

26. As per Claim 58, Miura teaches a system according to claim 55 wherein the first printing unit is arranged in a first printer or copier and the second printing unit is arranged in a second printer or copier, the first and the second printing units respectively generating at least one print image on a same carrier material. (Miura, Figure 3 and Column 3, Lines 1-9 when switch is set such that second printer is to print the material. The material is transferred from PC to first printer which contains the switching device and then sent to the second printer. The material does not change therefore the printer would print the same material.)

27. As per Claim 59, Claim 59 is the method claim of the printing system of Claim 55. Therefore the arguments and analysis is analogous to that made to Claim 55.

28. As per Claim 60, Miura teaches a printing or copying system, comprising:
at least first and second printing units; (Miura, Figure 3, Components “Laser printer” and “color inkjet printer”)
an operating unit for input or output of parameters of the printing or copying system;
(Miura, Figure 3, Component 3)

given an input of a first value of a first parameter of the first printing unit, a second value of the same parameter of the second printing unit being automatically changed dependent on the value of the first parameter; (Miura, Figure 3 and Column 3, Lines 1-9 when switch is set such that second printer is to print the material. The material is transferred from PC to first printer

which contains the switching device and then sent to the second printer. The parameter would be the print job as in print data. If the print data is changed by the computer than the print data sent to first printer will be changed thus the transmitted data from first printer to second printer will be changed.)

and the first and the second value being coupled such that, given a change of the first or second value in a coupled state, the respective other value is changed by a same amount. (Miura, Figure 3 and Column 3, Lines 1-9 when switch is set such that second printer is to print the material. The material is transferred from PC to first printer which contains the switching device and then sent to the second printer.)

29. As per Claim 63, Claim 63 is the method claim of the printing system of Claim 60. Therefore the arguments and analysis is analogous to that made to Claim 60.

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. **Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. USPN 7389329 hereinafter referred to as Naito as applied to Claim 33 and further in view of White USPN 6125372.**

32. As per Claim 34, Naito teaches a control system according to claim 33. Naito does not teach wherein the data transfer protocol comprises a Simple Network Management Protocol; However White teaches it. (White, Column 6, Lines 24-31)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of White into Naito. Naito teaches various components such as server, printer, and copying machines connected to each other via Ethernet. The Simple Network Management Protocol can be used over Ethernet and is effective in communicating between peripheral devices.

Therefore it would have been obvious to one of ordinary skill to combine the two references to obtain the invention in Claim 34.

33. **Claims 39-40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. USPN 7389329 hereinafter referred to as Naito as applied to Claim 38 and further in view of Colby et al. US2003/0055965 hereinafter referred to as Colby.**

34. As per Claim 39, Naito teaches a control system according to claim 38. Naito does not teach wherein the data transfer between objects defined in the programming language Java occurs with aid of a standardized model for abstract description of distributed objects; However Colby teaches it. (Colby, Paragraph [0051])

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Colby into Naito. When sending data to peripheral devices, there must be some instructions to direct the transmission to the correct end destinations. Java is a popular object oriented programming language therefore sending objects will benefit from being defined in Java.

Therefore it would have been obvious to one of ordinary skill to combine the two references to obtain the invention in Claim 39.

35. As per Claim 40, Naito in view of Colby teaches a control system according to claim 39 wherein the standardized model for abstract description of distributed objects occurs according to a Common Object Request Broker Architecture, (Colby, Paragraph [0051]) and the access to the control data and operating information occurs with the aid of a Remote Method Invocation communication. (Colby, Paragraph [0053])

Analysis is analogous to that made in Claim 39.

36. **Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. USPN 7389329 hereinafter referred to as Naito as applied to Claim 52 and further in view of Mandal et al. US2003/021795 hereinafter referred to as Mandal.**

37. As per Claim 53, Naito teaches a system according to claim 52.

Naito does not teach wherein the transfer occurs with aid of a Remote Method Invocation communication using a Simple Network Management Protocol, the database containing a management information base.

Mandal teaches wherein the transfer occurs with aid of a Remote Method Invocation (Mandal, Paragraph [0071]) communication using a Simple Network Management Protocol (Mandal, Paragraph [0043]), the database containing a management information base. (Mandal, Figure 7, Component 702)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Mandal into Naito. Naito teaches various components such as server, printer, and copying machines connected to each other via Ethernet. The Simple Network Management Protocol can be used over Ethernet and is effective in communicating between peripheral devices.

Therefore it would have been obvious to one of ordinary skill to combine the two references to obtain the invention in Claim 53.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MING HON whose telephone number is (571)270-5245. The examiner can normally be reached on Mon- Fri 7:30 to 5:00 EST; 1st Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571)272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. H./
Examiner, Art Unit 2625

/Mark K Zimmerman/
Supervisory Patent Examiner, Art Unit 2625